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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/566,021	12/20/2007	Nazir Khan	GJE.7547	9931	
	7590 03/07/201 K, LLOYD & EISENS		EXAMINER		
A PROFESSIONAL ASSOCIATION			CHIANG, TIMOTHY S		
PO Box 142950 GAINESVILLE, FL 32614			ART UNIT	PAPER NUMBER	
			1761		
			NOTIFICATION DATE	DELIVERY MODE	
			03/07/2011	ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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	Application No.	Applicant(s)				
Office Action Comments	10/566,021	KHAN ET AL.				
Office Action Summary	Examiner	Art Unit				
	TIMOTHY CHIANG	1761				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence ad	dress			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be time ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE!	l. ely filed the mailing date of this co (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 17 Fe	ebruary 2011.					
,	action is non-final.					
3) Since this application is in condition for allowan		secution as to the	merits is			
,	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
 4) ☐ Claim(s) 1-11 is/are pending in the application. 4a) Of the above claim(s) 7 and 8 is/are withdra 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-6 and 9-11 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or 						
Application Papers						
9) The specification is objected to by the Examiner 10) The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the off Replacement drawing sheet(s) including the correction of the off the oath or declaration is objected to by the Example 11).	epted or b) \square objected to by the Edrawing(s) be held in abeyance. See on is required if the drawing(s) is obj	e37 CFR 1.85(a). ected to. See 37 CF	, ,			
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of	s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)).	on No ed in this National	Stage			
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P	ite				
5. Patent and Trademark Office	27 Tourst					

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DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1-6 and 9-11 in the reply filed on 02/17/2011 is acknowledged.

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to

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be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-6, 9-11 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 11-12, 14-24 of copending Application No. 10/899888. Although the conflicting claims are not identical, they are not patentably distinct from each other because both are drawn to a composition comprising conductive polymers and ammonium octamolybdate.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

3. Claims 1-6, 9-11 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 10 of U.S. Patent No. 7485403.

Although the conflicting claims are not identical, they are not patentably distinct from each other because both inventions pertain to a laser-markable composition comprising a binder and ammonium octamolybdate.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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2. Claims 1-4, 6 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 3, 4 and 9 claims the limitation of "laser-markable" in defining a material. It is unclear as to the nature or mechanics of which a material is "laser-markable" as many materials can be "markable" by the use of various lasers, and through many ways including burning or charring, or other chemical change.

Claim 1 claims the limitation of wherein the "laser markable material" absorbs at 10,600nm. "10,600 nm" is unclear and indefinite in defining the present invention. The examiner construes the limitation as meaning "a wavelength of 10,600 nm".

Claim 1 claims that the "laser markable material" "absorbs" at 10,600nm. It is unclear how the material "absorbs" and to what degree it "absorbs".

Claim 1 claims the limitation of "that absorbs IR radiation". It is unclear whether this limitation modifies the "conductive polymer" component or the composition as a whole.

Claim 2 claims the limitation of wherein a binder has a "labile" group. It is unclear as to what functional group the applicant is claiming with the limitation of "labile" as "labile" simply means "changing".

3. The term "substantially colourless" in claim 6 is a relative term which renders the claim indefinite. The term "substantially" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

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Claim Rejections - 102/103

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 7. Claims 1-3, 5-6, 10-11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Lee et al. (US Pat. 6,351,063; hereinafter "Lee").

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Regarding claims 1-3 and 10-11, Lee discloses a composition comprising a conductive polymer (polypyrrole, polyfuran, polythiophene, polyaniline; col. 3, lines 6-10), a solvent (col.3, line 61-65), a binder (col. 3, line 20), and a material comprising a multivalent metal that undergoes a color change due to a change in oxidation state, on irradiation (col. 3, lines 12-19, col. 4, lines 1-6). While Lee does not specifically state that the color-change material is "laser-markable" that absorbs at 10,600 nm (wavelength), or that the color change is due to a change in oxidation state on irradiation, such is understood as intrinsic or inherent to the composition of Lee disclosing a black pigment which would absorb to at least a degree, wavelengths of 10,600nm, and conductive particles of metals and metal oxides (paragraph 3, lines 12-19 and lines 48-53). In the alternative, at the very least, such limitations would have been obvious to one skilled in the art at the time of invention as Lee discloses "pigment particles for adjusting the transmittance of light at different wavelengths" (paragraph 4, lines 1-3). Without further limitation on what is meant by "laser markable" and the degree of "absorbtion" at 10,600nm, or the nature of the "color change" as claimed, the limitations are either inherently met by the composition of Lee, or in the alternative, obvious in view of Lee as shown above.

Regarding claims 5-6, Lee's disclosure of black pigment particles and pigment particles for adjusting the transmittance of light at different wavelengths meets the limitation of a "color-former" and a "substantially colorless electron-donating dye precursor" within the broadest reasonable interpretation of "color former" and "substantially colorless electron-donating dye precursor".

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Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 10. Claims 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee in view of Madan et al. (US Pat. 5,567,763; hereinafter "Madan").

Lee discloses the composition as shown above, However, Lee fails to teach the composition comprising ammonium octamolybdate (AOM). Lee teaches the polymeric composition as a conductive film applied through spray coating (col. 5, line 12).

Madan teaches a spray-coat polymeric composition comprising AOM for the purposes of providing a suitable flame retardant (col. 7, lines 29-37).

It would have been obvious to one of ordinary skill in the art at the time of invention to have provided AOM in Lee's polymeric spray-coat composition in order to

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provide a suitable flame retardant known in the art as taught by Madan's teaching of polymeric spray-coating compositions.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIMOTHY CHIANG whose telephone number is (571)270-7348. The examiner can normally be reached on Monday - Thursday 9:00AM-5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Harold Y Pyon/ Supervisory Patent Examiner, Art Unit 1761

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/TIMOTHY CHIANG/ Examiner, Art Unit 1761 2/24/2011